

### **AMENDMENTS TO THE CLAIMS**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

#### **LISTING OF CLAIMS:**

1 - 7. (Cancelled).

8. (Currently Amended) A fuel cell system control unit comprising:

a first converter electrically connected to an electric power system

~~through a circuit breaker means;~~

an electric load connected to an electric line which ties the electric power system and the first converter;

a set of fuel cells connected to a DC circuit of said first converter through a second converter;

a secondary battery connected to said DC circuit through a third converter;

~~————— a current detecting means which detects AC currents from said converters and outputs their detected values;~~

a voltage detecting means which detects an AC voltage on the power system side of said circuit breaker means and outputs its detected value;

~~————— a fuel cell current detecting means which detects a current from said fuel cell set;~~

~~————— a fuel cell voltage detecting means which detects the voltage of said fuel cell set;~~

~~————— a secondary battery current detecting means which detects a current from said secondary battery;~~

~~\_\_\_\_\_ a secondary battery voltage detecting means which detects the voltage of said secondary battery;~~

~~\_\_\_\_\_ a receiving current detector for detecting the total of a current flowing through said first converter and a current flowing through an electric load connected in parallel with said first converter;~~

~~\_\_\_\_\_ means for calculating a receiving electric power based on from a receiving current detected by said receiving current detector and a system voltage detected by said system voltage detecting means;~~

~~\_\_\_\_\_ means for calculating the output power of the first power converter;~~

~~\_\_\_\_\_ means for calculating the load power which the load consumes based on the receiving power and the output power of the first power converter;~~

~~\_\_\_\_\_ means for calculating an average value of the load power by filtering the load power calculated;~~

~~\_\_\_\_\_ means for controlling the ~~first-third~~second power converters ~~converter~~ so that the output power of the ~~first~~second power converter approaches the average value of load power; ~~said means for controlling further comprising; and~~~~

~~\_\_\_\_\_ means for ~~causing~~ controlling said third power converter so that the secondary battery to output outputs a power value corresponding to the power value of which when said receiving power exceeds the preset receiving power value due to the increase of said load power; and~~

~~\_\_\_\_\_ means for calculating a current command value output by the fuel cells from said detected load power value to make power output by said second converter approximately equal to said load power.~~

9. (Previously Presented) The fuel cell system control unit of claim 8, further comprising:

a voltage regulating means which feeds back a DC voltage value detected by said first converter and outputs a current command value so that the product of the fed-back DC voltage value by the current command value may be equal to a power command value;

an automatic current regulator which feeds back said detected AC current value and outputs an output voltage command value to make the current equal to said current command value;

a pulse width modulation (PWM) means which receives said output voltage command value and outputs pulses to drive the converter; and

a control unit which controls charging and discharging of the power system and power according to said voltage command value.

10. (Previously Presented) The fuel cell control system according to claim 8, wherein said means for controlling said first-third converters further comprises:

a first current control means to make the current command value equal to the current of the fuel cell; and

a second current control means to make the current command value equal to the current of the secondary battery.

11. (Cancelled)

12. (Previously Presented) The fuel cell control system according to claim 8, wherein said control means comprises a means for calculating average values from said detected load power values.

13. (Cancelled)